Revolver Manual

“Raw steel transformed into precision”

KORTH - Revolver
Technical data and instruction manual

In the hands of the revolver shooter.

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1. Construction features of the KORTH-Revolver

· Costly material processing
· All essential parts are drop forged
· Heat treated parts with wear resistant surface
· Long life expectancy
· Extremely safe for the shooter
· Hammer forged specially selected barrel material
· Double and Single Action capability
· Double Action trigger with three adjustable let off regulating points
· Externally variable Single Action trigger weight
· Externally variable Single Action trigger stop
· Cylinder release lever located to the right of the hammer
· By means of a release button, the entire cylinder and crane can be removed from the frame
· Easy exchange of replacement cylinders without tools
· Double cylinder locking system
· Individually made / fitted action
· Extremely close tolerances exist in the entire weapon system
· High precision and efficiency obtained through superior workmanship

2. Notification

A weapon only belongs in the hands of an entitled person. Always handle your revolver as if it is loaded! Read owners manual completely before using your firearm.
Do not act rashly with your weapon, especially during functional troubles. We are not liable for operating errors or offenses against safety.

Use only ammunition in the caliber your weapon has been designed for. All laws are also applicable for reloaded ammunition, as this can void your warrantee. Normally, we only recommend Factory new ammunition.

3. Single-Action function

In Single-Action function the hammer has to be cocked by hand. Pull the hammer by the spur until it sets into its cocked position. Never pull the trigger during the cocking process.

1 Trigger weight

The Single-Action trigger weight is factory adjusted between 47.9 - 48.6oz (1360 - 1380g).
With an external adjustment screw, the trigger weight can be individually adjusted between 35.2 - 70.4oz (1000 - 2000g).
If your revolver is equipped with the match grip, the adjustment screw is intentionally hidden. As a result, the international sealing procedure during a match becomes a mute point.

2 Adjusting Single-Action trigger weight

A trigger spring stud is located in the frame behind the trigger guard, which is secured with a secondary slotted screw. To adjust the trigger weight, loosen the secondary screw on the right side with a screwdriver by turning it counter-clockwise 1/2 a rotation. However before doing that, a second screwdriver has to be set on the trigger spring stud on the left side of the weapon. The second screwdriver holds the trigger spring stud in its current position.
After loosening the screw on the right side, the position of the trigger spring stud can be varied. Turning counter-clockwise, meaning left, results in an increase of the trigger weight. A 10° turn results in a major change.
Turning the trigger spring stud clockwise decreases the trigger weight. After adjusting the trigger weight, the secondary slotted screw on the right side has to be tightened. Over tightening the trigger spring (turning too far to the left) should be avoided. Turning too far to the right should also be avoided, because the spring will be bent. The smallest turn will substantially influence the trigger weight. Fractions of a millimeter are enough. Therefore, changes should be done in a sensitive manner.
If the trigger spring stud has been completely relaxed, for instance because of insufficient detainment during the loosening of the side screw, then a turn by approx. 45° (approx. 1/8 screw turn) counter-clockwise, will result in a trigger weight of 47.9oz (1360g).
Make absolutely sure that the trigger spring is not relaxed too much. This might result in a trigger weight below 35.2oz (1000g), but more importantly will result in the fact that that the trigger cannot fully return to the forward position. As a result, the cylinder cannot rotate due to the fact that the transporter did not engage properly.
For the trigger adjustment, we recommend to clamp the weapon in a vice. To accomplish this, remove the grips and then clamp the revolver between felt cushions at the bottom of the frame.

Adjusting the Single-Action trigger weight
Simultaneously
Left side - hold the trigger spring stud screw
Right side - loosen the secondary side screw, then adjust the trigger spring stud screw slightly and retighten the right side clamp screw.

3.3 Trigger stop

The travel way of the trigger in the Single-Action mode is stopped by an adjustable trigger stop screw. This screw is located in the trigger guard behind the trigger. The protruding length of the trigger stop screw can be varied with the included .059" (1.5mm) Allen screw . Turning the screw clockwise into the frame increases the travel way of the trigger after release of the hammer. This travel way is decreased by unscrewing (counter-
clockwise) the trigger stop screw. Unscrewing the screw too far, can cause problems during the release of the trigger. In the extreme case, the shot cannot be released or the hammer won't be cocked.

Adjusting the trigger stop screw

4. Double-Action function

In this mode, the hammer is cocked by pulling the trigger. The maximum trigger weight is 158.6oz (4500g = 44.15N). Rimfire weapons can have a slightly higher trigger weight.

Please notice!

During DA-(Double Action) mode, it is absolutely necessary that the trigger reaches its foremost position before you pull the trigger again. If you pull the trigger too early, meaning during the forward movement, the cylinder might rotate without cocking the hammer.

4.1 Changing the pressure point of the Double-Action trigger

The Double-Action travel of the trigger can be equipped with a pressure point. This mode allows for the conscious target correction, briefly before the release of the shot. Pressure point adjustment is effected by exchanging small steel rollers of varying diameters. These rollers are inscribed with numbers from #3 to #1. The diameter varies by a few thousandths of an inch (100th of a mm). Insertion of roller #3 will yield a recognizable pressure point, which will increase with the insertion of roller #1.In this way, the shooter can individually adjust the pressure point to their personal desire. Wheel #3 is installed by the factory. This yields in an absolutely smooth hammer travel with a trigger weight of approx. 158.6oz (4500g = 44.15N).

4.2 Roller replacement

For the technically trained customer, we will give a step-by-step explanation for the exchange of the roller. In general, we would prefer you to have this type of work done by your gunsmith or our certified Factory staff.
1. Remove the cylinder and grips.
2. Cock the hammer (#35), connect the hammer strut (#40) with hammer spring guide housing (#43). Use a hardened pin with a diameter of approx. .047" (1.2mm).
For later models, the included .059"(1.5mm) Allen screw can be used.
Pull the trigger and release the hammer.
3. Loosen the trigger attaching screw (#63) but don't remove it. Normally, six full turns in counter-clockwise direction are sufficient. Remove the fitted pin for the side-plate. Lift the side-plate on the left side of the weapon. The side-plate has to be lifted with a screw-driver carefully. Please note that the tool is only inserted between the frame and the side plate. The tool should not be pried against any action parts.
4. Remove the hammer spring assembly (#40-43), the transporter, and the hammer cocking cam (#33) including the holding pins.
5. Pull the trigger slightly and lift up the bolt and the cylinder release lever (#44).
6. Remove the trigger roller with forceps from the trigger and insert the roller of your choice.
7. Insert the transporter including guide pins.
8. Install the cylinder release lever (#44) with the spring (#46) concomitantly. In order to do this, the spring has to be inserted into the cylinder release lever, then has to be rested in the cut-out of the cylinder release lever and then has to be inserted into the cut-out of the frame.
9. Pull the trigger carefully backwards (approximately between .079 -.118" (2-3mm) and insert the hammer. Please notice that the hammer complete with axle has to be inserted not only in the release lever but also into the cut-out of the frame.
10. Insert the retaining pin for the hammer with the guide pin.
11. Insert the hammer spring unit carefully in between the hammer and the frame anchor. Be cognizant of the correct positioning of the cut-out for the pin for the hammer strut (#39).
12. Insert and install side plate with the external transporter lever to be pushed into the cut-out of the side plate. Tighten the side plate and trigger screw.
13. Slowly cock the hammer. After putting pressure on the hammer spring, the previously installed arresting pin can be removed. In this way, the hammer is retained and slowly de-cocked after removal of the arresting pin.
14. Now, the final assembly of the grip and the insertion of the cylinder can occur.
ATTENTION !
Do not perform a functional test during the mounting process. We are not liable for the mounting process and for consequential damages if not performed by Factory authorized personnel.

5. Safety equipment

The revolver has an automatic hammer drop lever. This safety prohibits an intentional hit of the hammer onto the firing pin. The hammer can only reach the firing pin when

the trigger is fully cocked. The proper function of the safety is directly connected to the correct movement of the trigger. A delayed trigger, e.g. due to a contamination or due to a trigger return spring that has been tensioned insufficiently, can influence the function of the safety.

Please notice :

Do not decrease the SA-trigger weight remarkably below 35.2oz (1000g), because not only the pre-travel, but also the function of the safety is influenced.

6. Loading and unloading

Contrary to most cylinder release levers located at the side, our revolver has the cylinder release lever to the right of the hammer. The advantage of this design is the faster and easier handling of the revolver. The cylinder release lever is pushed by the thumb in the direction of the muzzle. The index finger of the right hand then pushes the cylinder to the left and out of the frame. The shells are emptied out by operating the cylinder locking bolt via the left hand. The cylinder locking bolt, serving as an ejector, is pushed aft into the cylinder. When the reloading is completed with the left hand, the positioning of the revolver in the right hand has never changed.

Release and opening of the cylinder

Loading the cylinder

The cylinder should be fixed in the open position during the unloading process or while using the ejector.For this, one can grab the cylinder with one or two fingers of the left

hand (from the bottom right), through the window opening of the frame. The ejection rod can be operated with the thumb.
Fixing the cylinder accelerates the unloading process. Furthermore, it will prevent the cylinder from falling back into the frame opening, and ergo keeping the employed ejector from hitting the frame. If this occurs, it might cause damage to the surface finish.
While fixing the cylinder, the muzzle should always point downwards and/or in a safe direction.
While unloading the cylinder, the revolver should be pointed upwards, in the opposite but safe direction.

6.1 Abrasive marks of the cylinder stop

While rotation of the cylinder occurs by pulling the trigger, no abrasive marks at the cylinder stop on the outer diameter of the cylinder can occur. Such abrasive marks only occur when turning the cylinder improperly by hand.
While closing the cylinder, the cylinder stop should be inserted into an arresting groove or in the area of the ramp. In this way, the abrasive marks on the cylinder can be generally avoided.

6.2 Optional replacement cylinder

After opening the cylinder, the cylinder/crane assembly can be removed from the front of the frame by pushing the button on the right side of the revolver frame.
During the installation of the cylinder/crane assembly, the button has to be pushed again. The arresting piece will arrest the crane-axis.

This assembly allows for a non problematic insertion of a replacement cylinder and makes the cleaning of the weapon easier. By removing the cylinder/crane assembly from the frame, an “added safety”, (for instance at the shooting line); can be achieved.

Unloading the cylinder

7. Interchangeable cylinder

The barrel material used for the weapons with interchangeable cylinders depends on the law restrictions for the nominal caliber. Precision losses due to compromises are not to be expected. Occasionally, minor changes in the position of the point of aim in both calibers may occur. This problem can be overcome easily by selecting the right ammunition or by adjusting the sights.
The revolver in caliber .357 Magnum is even suitable for the pistol calibers 9mm Para and 9x21 IMI.
Due to physical restrictions, one cannot expect the same precision as gained with competition ammunition. Reloading or choosing adapted factory ammunition can yield major improvements.

For the use of rimless pistol cartridges, we have developed a special extraction technique. This design closely approximates the use of these rimless cartridges to that of rimed cases. This is accomplished by a spring-reinforced torsion of the extractor retaining plate. When
inserting the cartridges into the cylinder, the extractor, which was twisted by about .024"(.6mm) moves back into its original position.
When the cartridge is fully inserted in the cylinder, the extractor rotates into the rim of the cartridge shell. With the extractor, rimless cartridges can be easily removed from the cylinder. Due to the conical shape of the shell compared to the charging holes, shells of pistol cartridges are loosing their guidance during the extraction process. If the weapon isn't held properly, the shell might fall back into the charging holes of the cylinder during the extraction process. In this event, the extractor retaining plate has to be fully inserted back into the cylinder. This process might be facilitated by a light pressure of the finger.
In order to secure optimal functionality, we recommend to tilt the weapon with the muzzle downward during loading. During unloading, the revolver should be held oppositely, with the muzzle upwards. This handling is also applicable for typical revolver cartridges.
The interchangeable cylinders are manufactured as a "pair" and are, together with the crane, individually fitted into the frame. In this way, we can create the tightest fit with the lowest tolerances.

Please be aware that a remaking of an interchangeable cylinder results in additional work and thus in additional expenses compared to the serial production.

8. Sight systems

All our revolver models have elevation and windage adjustable sights. The adjustments are carried out by means of a screwdriver.

Sights
Model Combat / Model Sport / Model Target

8.1 Model Combat

8.1.1 Elevation adjustment

A screw is inserted in the vertical axis of the sight, which can be accessed from the upper part of the sight. With this screw, the elevation of the sight can be individually adjusted.
Before using the elevation adjustment screw, it is useful to slightly loosen the windage adjustment screw, which is located at the side of the sights. A complete loosening of the windage adjustment screw is not necessary. After the elevation adjustment is performed, the windage adjustment screw should be retightened.

Therefore, resulting in a clamping action of the elevation adjustment. In this way, an unintended elevation adjustment cannot occur.
When shooting low, the elevation adjustment screw has to be turned clockwise.
When shooting high, the adjustment takes place by turning the screw counter-clockwise.

8.1.2 Windage adjustment

The windage adjustment of the combat sight is accomplished by means of two retaining screws (one located on each side). The adjustment is performed by loosening one screw and tightening the opposite screw..

When shooting left, the left screw has to be loosened (counter-clockwise) and the right side screw has to be tightened. When shooting to the right, the adjustment has to be done in the opposite order.

8.2 Model Sport

8.2.1 Elevation adjustment

Elevation adjustment occurs via the elevation adjustment screw located in the sight. The elevation adjustment has a micrometer-click system. The elevation change of the sight is .0016"(.042mm) per click.
When shooting too high, the sight adjustment screw has to be rotated in the clockwise direction.
When shooting too low, the sight adjustment screw has to be rotated in the counter-clockwise direction.

Elevation adjustment of the Sport sights.

8.2.2 Windage adjustment

The windage adjustment is effected via the windage adjustment screw at the right side of the sight notch.
When shooting to the left, this screw has to be turned counter-clockwise. Shooting to the right is corrected by a slight clockwise turn. A full turn of the adjustment screw (in the case of a 6" revolver at 82' (25m) results in a change of the point of impact by approximately 3.94" (100mm).

8.3 Model Target

Elevation and Windage adjustment

If your weapon is equipped with exchangeable rear sight blades, the elevation- and windage adjustment can be done by hand. This can also be facilitated by the use of a coin.
A slight pressure on the upper side of the sight, done by e.g. the thumb, can relieve the elevation adjustment screw during this slight adjustment.
The windage adjustment screw is located on the left side. Elevation and windage adjustment are effectively influenced by means of a micrometer-click screw. The sight physically moves .0016"(.042mm) with each click.
The adjustment values for elevation and windage vary slightly for the different calibers, barrel lengths and loads. For a 6" barrel and most target loads in caliber .38 Special, the change is approximately .394" (10mm) at a distance of 82' (25m). The exact values for your weapon have to be determined for each load.

8.3.1 Rear sight blade replacement

At the upper side of the rear sight notch, a .059"(1.5mm) Allan screw is located in the rear sight blade. This screw is loosened counter-clockwise with the included Allen wrench until the rear sight blade can be taken out from the back of the rear sight notch.
The included rear sight blades are marked on the inside by numbers from 1 to 3. The numbers correlate with the following rear sight notch (width).
#1 - width .134" (3.4mm)
#2 - width .138" (3.5mm)
#3 - width .142" (3.6mm)

Changing the rear sight

Tighten the screw after the insertion of the new rear sight blade. Occasionally check this screw to make sure it remains secure, as well as the rear sight blade, while shooting.

8.4 Exchangeable front sight system

If your weapon is equipped with an exchangeable front sight system, you have the option to change different front sights.
Beyond the standard equipment, you can additionally order individually shaped sights.
The exchangeable front sights are installed via an Allen screw located at the muzzle of the barrel.
The screw in the barrel rib is unscrewed by approximately .158" (4mm) with the included .059" (1.5mm) Allen wrench. Then, the front sight can be taken out of the rib.
During removal, as well as during inserting, the position of the holding pin should not be changed. The Allan screw is tightened by screwing it with moderate pressure against the front sight. The tight fit of the exchanged front sight has to be checked occasionally during shooting.

8.5 Summary of rear sight adjustment
Combat sights:
in the case of shooting low (Æ) clockwise adjustment is required
in the case of shooting high (Å) counter-clockwise adjustment is required
in the case of shooting left - loosen left, tighten right
in the case of shooting right - loosen right, tighten left
to loosen (Å) to tighten (Æ)
Sport- and Target sights:
in the case of shooting low (Å) counter-clockwise adjustment is required
in the case of shooting high (Æ) clockwise adjustment is required
in the case of shooting left (Å) counter-clockwise adjustment is required
in the case of shooting right (Æ) clockwise adjustment is required

9. Grip replacement
The grip screws can be removed either from the right or from the left side. Because of the function of the opposite side as a screw nut, the rotation of the screw from that side has to be accomplished with a second screwdriver.
After removal of the grip screws, a small pin is inserted at an angle to where the previous grip screw was removed. Via this method, the opposite side of the grip is loosened from the frame without damage. The second grip plate can then be easily taken off.
If the weapon is used alternatively with standard- or match grips, it is necessary to exchange the lower retaining pin (part #65) as well. This pin can be driven laterally from the frame. The included locating pin, that is abbreviated on one side, has to be inserted in a way that it sticks out only on the left side of the frame (left = the cover plate side). For the left handed match grip the assembly is done on the right side.
After loosening the retaining screws, the target grips are pulled apart in parallel. This is necessary, because of the additional pinning. Both halves should not be loosened from each other by force or tilting. Damage or worse yet, breakage will result.

10. Accessories
10.1 Barrel weight

The barrel weight is installed underneath the barrel, by pushing it from the front at the bottom of the barrel shroud. However before attempting this, the attaching screws have to be backed off.
The barrel shroud, as well as the surface of attachment have to be free of oil. To avoid damage of the barrel shroud, any dirt has to be removed. Then, the barrel weight can be pushed on the barrel shroud. Preferably, the barrel weight should be installed so that it aligns itself with the front edge of the barrel shroud. Now, the clamping screws are tightened evenly with the included .118" (3mm) Allen wrench.
During shooting, one should periodically check that the barrel weight is secure.

10.2 Trigger shoe

The trigger shoe is attached to the trigger by a clamp screw at the side. For mounting, the hammer has to be cocked. This puts the trigger in its back position. The trigger shoe can be easily put on the trigger. Before final tightening of the trigger shoe with the clamp screw, the trigger should be put back into its forward (D.A.) position. Install the trigger shoe in such a way that it does not touch either the frame or the trigger guard, otherwise, the trigger shoe might hinder the travel of the trigger. This will also result in improper rotation of the cylinder.

10.3 Screwdriver set

On request, you can order a set of 4 screwdrivers. We intentionally manufacture our screw slots more narrow than the regular DIN-norm, which makes the use of regular tools difficult. Therefore, the correct screwdrivers have to be specially manufactured, ergo resulting in a relatively high price.

11. Gun maintenance

To ensure perfect functioning of your weapon over time, a periodic gun maintenance is absolutely necessary.

The action and all other movable elements should be oiled. Besides cleaning the functional parts, the surface of the weapon has to be cleaned and oiled as well. When using spray oil, a take down of the weapon is not necessary. Only use modern, water-impenetrable weapon oils with a low viscosity.
Dirt can cause malfunctioning of the weapon. Avoid this by cleaning your weapon frequently and carefully.
For example: Remaining dirt like unburned powder can easily get underneath the ejector during unloading. This can result in the fact that the extractor retaining plate does not completely return into the cylinder. This might not be seen by the first glimpse. However, the pressure between extractor and recoil plate can increase so much, when the cylinder is closed, that the opening of the cylinder is no longer possible. Please be aware of things like this, while cleaning your weapon.Before use, it is absolutely necessary to remove oil and other residues inside the barrel and cylinder. Oil in the barrel and also in the charging holes, can reduce the efficiency of your weapon.
Please note:
Bluing of a metallic surface is principally an oxidation process. Every oxidation can be changed by further chemical reactions. Hand sweat can sometimes be enough to induce this. Besides causing rust, pitting, etc., even the bluing can be removed by sweat. Meticulous care of the surface of the weapon, especially at the back of the frame, will help you maintain the bluing for a long time.

Lead residues:
When using lead ammunition, residues will occur in the barrel and cylinder. These lead residues can be removed e.g. with a soft brass or nylon brush and mild solvents. (Never use brass brushes “dry” and only use occasionally.) The solvent has to be completely removed and the complete weapon has to be oiled. The sooner the lead residues are removed, the easier the work is accomplished.
We naturally do not guarantee a chemically modified surface. When buying a lead or non ferrous metal solvent, you should verify that it will not affect or change the bluing.

11.1 Cylinder take-down
A complete take-down of the cylinder unit, e.g. for cleaning purposes is not necessary. Lightly oiling it from the “outside” is sufficient, even in extended use.
The assembly of a revolver cylinder is relatively complicated. Possible maintenance work should therefore only be done in our workshop.

11.2 “Dry firing”
“Dry firing” should be only performed using snap caps.
Releasing the action without the use of a snap cap can result in an increased risk of firing pin breakage.

12. Shooting performance
Besides the complete construction, the optimally acting in combination of compression slope with the axiallity of barrel- and cylinder drilling, as well as the minimal air gap, leads to the precise shooting performance of our revolver. The shooting performance of

our weapons has been proven worldwide in numerous tests. In addition to the construction features of the weapon and the exact manufacturing tolerances, the shooting performance is also determined by the ammunition employed.

In order to give a statistically covered statement of the shooting performance of our weapon, numerous test series need to be performed. Single shooting results are therefore subjective. For this reason, we abstain from including an original target.

13. Guarantee

Please note that improper use, alterations of the mechanics of the weapon by you or a third person, or by changing the design, will immediately void and nullify all guarantees.

Revolver cutaway

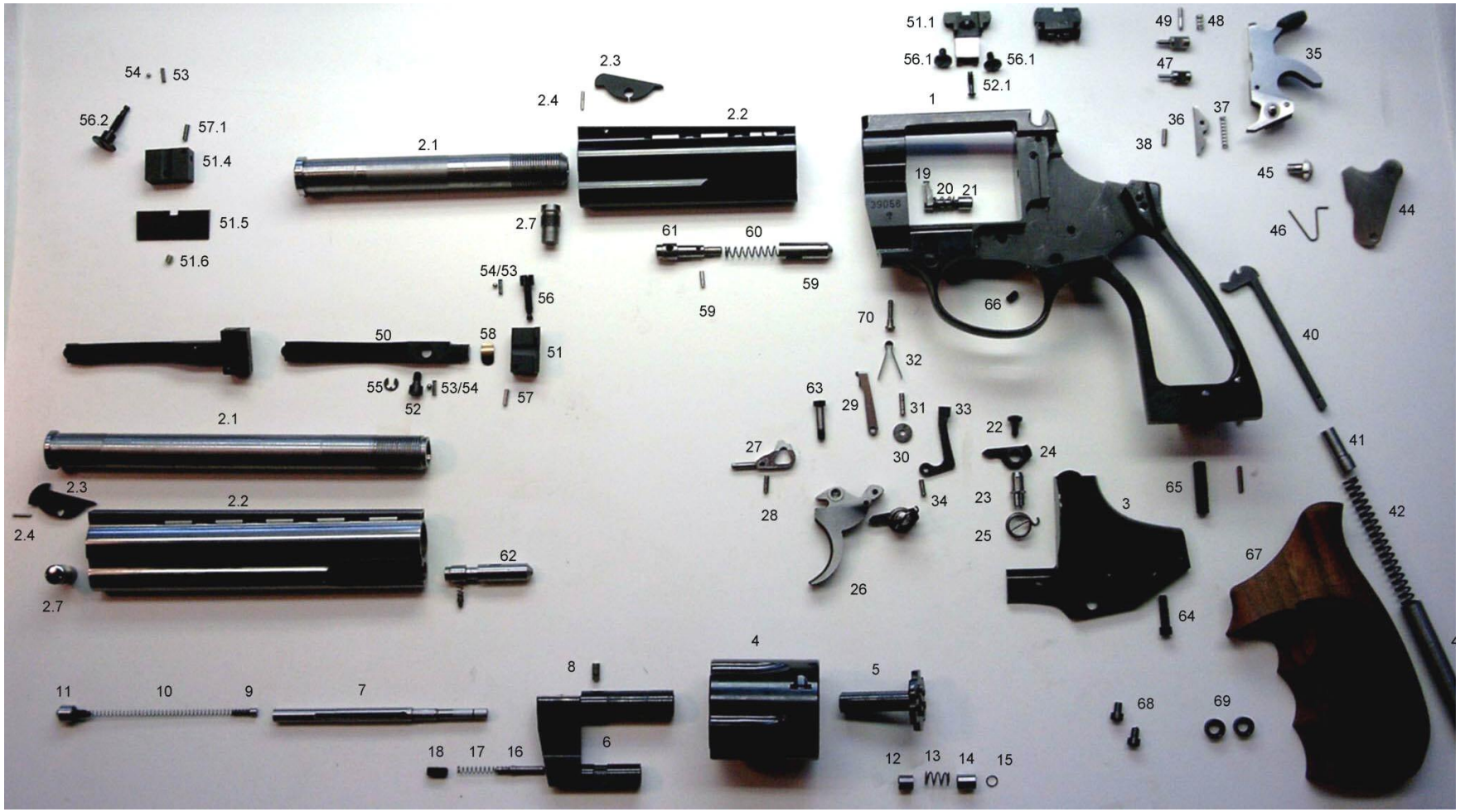
15. Spare parts list - Revolver
1. Frame
2. Barrel assembly
2.1 Barrel
2.2 Barrel shroud
2.3 Front sight*
2.4 Front sight retaining pin
2.5 Front sight Target Model *
2.6 Front sight retaining screw Target Model
2.7 Barrel shroud screw
3. Side plate
4. Cylinder
5. Extractor
5.1 Extractor spring for rimless cartridges
6. Crane
7. Cylinder locking bolt
8. Cylinder retaining pin
9. Spring guide rod
10. Return spring for extractor
11. Cone-shaped screw for #7
12. Spacer bushing
13. Cocking spring
14. Guide bushing for #7
15. Cir-clip for cylinder mount
16. Plunger for cylinder stop
17. Compression spring for cylinder stop
18. Retaining screw for #16 and #17
19. Crane locking piece
20. Compression spring for #19
21. Retaining nut for #19
22. Locking screw for trigger spring stud
23. Trigger spring stud
24. Trigger spring pawl

25. Trigger wind-up spring
26. Trigger
27. Cylinder stop
28. Pin for cylinder stop
29. Transporter
30. Double action roller*
31. Guide pin for transporter and double action roller
32. “V” spring for transporter
33. Hammer cocking cam
34. Retaining pin for #33
35. Hammer complete with axle
36. Hammer lifter
37. Compression spring for #36
38. Retaining pin for #36
39. Pin for #40
40. Hammer strut
41. Bushing for hammer spring
42. Hammer spring*
43. Hammer spring guide housing
44. Cylinder release lever
45. Cylinder release lever plunger
46. Spring for #45
47. Firing pin
48. Firing pin return spring
49. Firing pin limit pin
50. Tangent sight base Model Sport
51. Rear sight notch Model Sport
51.1 Rear sight notch Model Combat
51.2 Adjustable insert to fit sight notch Model Combat
51.3 Retainer for height adjustment Model Combat
51.4 Rear sight with notched inserts Model Target
51.5 Exchangeable notched rear sight blades Model Target*
51.6 Locking screw for sight blades
52. Height adjustment screw for Model Sport
52.1 Height adjusting screw for Model Combat
52.2 Height adjustment screw for Model Target
53. Compression spring for height adjustment
54. Steel ball for height adjustment
55. Snap ring for height adjustment screw
56. Windage adjusting screw for Model Sport
56.1 Windage adjusting screw for Model Combat
56.2 Windage adjusting screw for Model Target
57. Retaining pin for windage adjusting screw for Model Sport
57.1 Retaining pin for windage adjusting screw for Model Target

58. Leaf spring for rear sight notch
59. Cylinder locking plunger with retaining pin
60. Compression spring for cylinder locking bolt
61. Locking bolt for cylinder lock
62. Retaining pin with compression spring for #61
63. Trigger attaching screw
64. Side-plate screw
64.1 Fitted pin for side-plate
65. Lower retaining pin for grips
65.1 Single retaining pin for Match grip
65.2 Upper retaining pin for grips
66. Trigger stop screw
67. Grips*
68. Grip screws (pair)
69. Grip screw bushings (pair)
70. Stop pin for transporter lever compression spring

* Variable equipment: please specify exactly the size you desire.

Revolver in Parts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Additional info / Warnings

KORTH-
“Raw steel transformed into precision”

In the world of first-class firearms, the name “KORTH” is synonymous with precision. This is a direct result of employing only specially selected materials coupled with skilled labor. This policy guarantees superior shooting performance as well as extremely long weapon life.

The KORTH double action revolver is “THE” weapon for demanding marksmen. It is conspicuous for its progressive design and above-average exacting craftsmanship, even down to the last detail. Every weapon is a masterpiece.

Distinguishing advantages of the KORTH revolver:

1. Outstanding shooting performance
2. Double Action trigger with adjustable pressure points
3. Externally adjustable trigger pull and trigger travel stop
4. Innovative cylinder release lever
5. Removable cylinder and crane
6. Optional replacement cylinders for the following calibers:
   .357 Magnum / 9mm Para / .38 WC
   .32 Magnum / .32 S&W long
   .22 Magnum / .22 l.r.

Materials employed:

The barrel of a KORTH weapon is made from special steel shaped into form via the hammer process. All essential parts, such as the frame, side plate, sear, cylinder, trigger and hammer are constructed from forged, high quality alloy steel. These parts are then heat-treated, case hardened and tested to a tensile strength of approximately 60 Rockwell (1,480 N/mm2). This ensures a “glass hard”, wear proof surface. Despite its extremely high tensile strength, the steel is very ductile and highly fracture proof. This quality material ensures a very long life span and a consistent degree of precision to all parts. This is of paramount importance for reliability and superior shooting performance. All KORTH revolvers are manufactured from the most suitable and selected material. Die cast, sintered metal or other substitute materials are not employed.

Double Action trigger with adjustable pressure points:

Pressure point adjustment is effected by exchanging small steel rollers of varying diameters. These rollers are inscribed with numbers from #3 to #1. Roller #3 has the

largest diameter and is factory installed in the weapon. This results in an absolutely soft double action. From #2 to #1, in that descending order, the pressure point becomes harder. Rollers #2 and #1 are supplied with the revolver, together with an allen wrench in order to adjust the trigger stop screw. By changing the rollers, the marksman is able to effect differentiation to, and adjustment of the trigger pull in accordance with his / her own ideas and existing circumstances. With a little practice, one can shoot with this novel type of double action trigger (D.A.) almost as well as with the hammer cocked (S.A.).

Pressure point adjustment via roller replacement:

1. Remove grips and cylinder / crane assembly.
2. Cock hammer, captivate main spring by inserting a pin into the spring guide rod, slowly release hammer.
3. Loosen front cover plate screw and remove rear cover plate screw. In order to remove the cover plate, the captivated main spring and guide rod must be removed from the frame. A suitable pry-bar is inserted carefully into the milled section of the frame, ergo effectively removing the side plate.
4. Remove the firing pin spring rod, transporter lever and the hammer safety, including the guide pins.
5. Slightly cock the trigger and at the same time remove the hammer as well as the locking lever.
6. With tweezers, remove pressure point rollers from the trigger and insert alternative rollers as desired.
7. Re-insert transporter lever including guide pins.
8. Slightly cock the trigger while simultaneously inserting the hammer with the locking lever. Attention must be observed in regards to the guide pin for the firing pin spring rod.
9. Replace hammer locking lever and pin.
10. Re-install the firing pin spring rod.
11. Install side plate and at the same time ensure that the protruding transporter lever is pressed into the milled section of the cover plate. Firmly tighten the cover plate screws.
12. Carefully place the previously captivated main spring and guide assembly into the milled section of the hammer so that the guide pin in the hammer is properly set in the firing pin spring rod.
13. Slowly cock the hammer and insert the guide assembly into the butt of the frame.
14. Remove the arresting pin previously installed to captivate the main spring while slowly easing the hammer tension.
15. Replace grips and cylinder / crane assembly.

ATTENTION!
Do not carry out any form of functional testing during assembly!

Trigger pull:

The KORTH revolver is factory adjusted with a single action trigger pull of 49.34oz (1400g). By means of the trigger pull adjustment, the marksman is infinitely capable of adjusting this tension within the parameter range of 35.24 - 88.11oz (1000 - 2500g).

Single Action Only:

By special request, revolvers can be ordered with Single Action Only function. This revolver, when constructed and delivered, will have no double action capability. In order to fire this weapon, the hammer will have to be cocked each and every time - hence the name.

Trigger pull adjustment:

Machined into the frame, behind the trigger guard, is a spring tension bolt which is secured on the right side by means of a straight slotted fastener. In order to regulate the amount of desired trigger pull, this slotted fastener is loosened 1/8 to 1/4 of a revolution by means of a screwdriver. It is now possible with a screwdriver on the left side to rotate the spring tension bolt and thereby effectively regulate the desired trigger pull. By rotating counterclockwise, the trigger spring tension is increased and by rotating the spring tension bolt clockwise, the trigger spring tension is reduced. When the desired trigger pull has been achieved, then the locking screw on the right side is re-secured. In this way, the trigger resistance cannot change even during long periods of shooting. It is important that the trigger spring is not over stressed: i.e., by too great a turn to the left. Also, too great a turn to the right should also be avoided, because then the spring is bent upwards. The slightest rotation, even fractions of a millimeter, has an effect on the trigger pull. For this reason, the adjustment should be carried out with a certain amount of sensitivity. In this way, over- as well as under- tensioning of the trigger spring is avoided. Make sure the trigger spring is not overly loosened as this will prevent the trigger from being returned to its forward most position. During competitions, once the desired trigger pull is tested and meets the requirement set forth in that event, this adjustment screw can be temporarily sealed by the inspector and subsequently rechecked.

Care of the weapon:

In order to insure flawless functioning of your weapon, we only recommend cleaning / maintenance with Kleen-Bore 3n1 gun conditioner. Any residual lead / residue in the

barrel can easily be removed after shooting by means of a nylon or a brass brush with the employment of Kleen-Bore 3n1. Soaking stubborn areas may be necessary. Try to use only jacketed ammo if possible, as this will reduce lead build-up. Do not use a bronze or stainless brush for the purpose of cleaning the barrel as this will scratch / damage the polished bore. Always remove the grips when thoroughly cleaning your weapon. Lightly lubricate the lock mechanism as well as all moving parts with the same Kleen-Bore 3n1 gun conditioner.

Caliber Table (for optional cylinder):

Subsequent manufacture of a conversion cylinder (after delivery) cannot be performed because of the extremely close tolerances and the high cost involved. Because this is a specially made item, then we only can perform this option when ordering / purchasing a new weapon.
Standard Caliber / Optional Caliber

.357 Magnum 9mm Para or .38 Spec.
.32 Magnum .32 S&W long
.22 Magnum .22 l.r.

Sighting mechanism for the Model Sport:

A flat, glare-free, elevation and windage adjustable, notched rear sight is installed on the Model Sport revolver. A ventilated rib, as well as a milled front sight, comes standard. All parts are sandblasted to provide a matte finish.

Sight adjustment:

Windage adjustment is effected by the rotation of the windage screw (located in a recessed cavity of the sight blade). If the resulting shots are too far to the right, then rotate the adjustment screw clockwise. Consequently, if the shots are too far to the left, then rotate the adjustment screw counterclockwise. A complete revolution of the adjustment screw results in a target correction of 3.34" (85mm) at a distance of 82' (25m). Elevation adjustment is effected by the rotation of the elevation screw (located forward of the sighting notch). If the resulting shots are too high, then rotate the adjustment screw clockwise. Consequently, if the shots are too low, then rotate the adjustment screw counterclockwise. One click of the adjustment screw results in a target correction of .552" (14mm), at a distance of 82' (25meters).

Sighting mechanism for the Model Combat:

A flat, glare-free, elevation and windage adjustable, contoured rear sight is installed on the Model Combat revolver. The top surface of the barrel shroud is finely grooved so as

to create a glare-free line of sight. A milled front sight is installed and all parts are sandblasted to provide a matte finish.

Sight adjustment:

When performing the elevation adjustment, it is advisable to loosen one of the side retaining screws. This will alleviate the side tension and facilitate the adjustment. After making the desired adjustment, the previously loosened side retaining screw must be re-tightened. Windage adjustment is effected via the two side retaining screws. If the resulting shots are too far to the left, then loosen the left retaining screw and tighten the right retaining screw. In this way, the sighting comb is relocated to the right. If the resulting shots are too far to the right, then the opposite procedure is performed.

Cylinder opening lever:

This handgun has a cylinder release lever located to the right, adjacent to the hammer. The primary advantages of this arrangement lies in the faster, easier and safer use of the weapon. When this release lever is activated (pushed forward) via the thumb, the cylinder is unlocked. Now, by means of your right index finger, one can swing the cylinder out. The left hand can push on the ejector rod, thereby pushing out the spent cartridge cases. Fast reloading is accomplished, and in this manner, the positioning of the revolver in the marksman's hand is not altered. This uninterrupted grasp of the weapon equates into quicker and more precise re-acquisition of the target, as well as safer handling.

Cylinder / crane removal:

When the cylinder is swung out, the spring loaded button (located on the right side of the frame) can be pushed, thereby releasing the crane. While holding this button in, remove the cylinder / crane assembly from the weapon by moving it forward. When replacing the cylinder / crane assembly, press and hold the release button while inserting the assembly. Once fully installed, release the button. This will re-lock the cylinder / crane to the frame of the revolver.

Warning!

Make sure the revolver is unloaded and safe, prior to any procedural instructions or handling of the firearm! Unloading and safety features can be found in sections #5 and #6 of this manual.

Additional Warnings!

Be a safe shooter….. read these warnings before you use this firearm!

You must understand that it is impossible to make this firearm absolutely safe from firing under every and all circumstances when it is in a loaded condition. This risk can be greatly diminished or eliminated by simply keeping your firearm unloaded until you are actually ready to shoot. Like any other complex item, a firearm can be damaged or broken by abuse, such as dropping it on a hard surface. If you drop your gun, unload it and have it checked by a competent gunsmith or our Factory personnel to be sure that no internal damage has occured which might make it unsafe or unreliable.
Always keep the firearm pointed in a safe direction. A safe direction means a direction which will not permit a discharged bullet to strike a person. A bullet may penetrate a wall, ceiling, floor, window, etc. and still be capable of injuring or killing a person.
Always know exactly where the muzzle of your firearm is pointed and always keep your finger off the trigger until you are ready to shoot. Never shoot at hard flat surfaces or water. Bullets can ricochet in unpredictable directions. Never climb a tree or jump with a loaded firearm.
Store your firearm and the respective ammunition in a secured location away from children or unentitled people. If a child finds a loaded firearm, injury or death may result. Never leave a loaded gun unattended. Your firearm is your responsibility!
Guns and alcohol or drugs do not mix. Never take them before or during shooting.
Always handle or treat every firearm as if it were loaded. If a firearm fails to fire when the trigger is pulled, keep it pointed at the intended target for at least 30 seconds. Sometimes a malfunction in the firearm may cause a delayed firing or a primer or powder ignition will cause a “hang fire” and the shot will go off after a short pause. Be very careful to keep the muzzle in a safe direction while the “problem” is cleared.
Never rely on a firearm’s safeties to protect you from unsafe gun handling. Safeties are only mechanical devices and not a substitute for common sense. When you are around firearms, always think of gun safety. Never disobey the rules of safe gun handling.
Never “play” with a firearm. Your gun can’t think, but you can!

Caution!

Your firearm has been designed for ammunition of a specific type and caliber. Use only ammunition in conformance to the provisions of C.I.P. or SAAMI and corresponding to the caliber of the firearm. The correct caliber is specified on the firearm. Particularly when using reloaded ammunition, the permitted gas pressure according to C.I.P. or SAAMI must not be exceeded. Excessive pressures can damage or even “blow up” any firearm. Ammunition with velocities and pressures higher than those for which the firearm was designed will subject the firearm to additional stress, may cause excessive wear and may cause serious damage to your firearm and to you!
Before loading, always wipe off any excess grease and oil and check that the bore of the barrel is clean and that there is no obstruction in the bore!
Always wear ear protection and safety glasses when shooting. Also, alert bystanders to the importance of wearing ear protection and safety glasses!
Any damage or harm due to neglection of above instructions, releases the producer and its distributors from any product liability and / or warranty.

A copy of the owners manual for your firearm is available from Korth Germany GmbH, Robert-Bosch-Strasse 11, D-23909 Ratzeburg, Germany.